



AMENDMENTS

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Please cancel claims 65-67 without prejudice or disclaimer. Please add the following new claims 74-94:

74. (New) A pharmaceutical composition comprising a peptide having less than fifteen amino acids and a pharmaceutically acceptable carrier, wherein:
the peptide comprises an epitope consisting of about 8 to about 11 amino acids; and
the epitope corresponds to an HLA-A3 motif having an amino acid at position two from the amino terminal amino acid of the epitope selected from the group consisting of L, M, V, S, A, T, and F and having K as the C-terminal amino acid.

DI 75. (New) A pharmaceutical composition comprising a nucleic acid which encodes a peptide having less than fifteen amino acids and a pharmaceutically acceptable carrier, wherein:
the peptide comprises an epitope consisting of about 8 to about 11 amino acids; and
the epitope corresponds to an HLA-A3 motif having an amino acid at position two from the amino terminal amino acid of the epitope selected from the group consisting of L, M, V, S, A, T, and F and having K as the C-terminal amino acid.

76. (New) A pharmaceutical composition comprising a peptide having less than fifteen amino acids and a pharmaceutically acceptable carrier, wherein:
the peptide comprises an epitope consisting of about 8 to about 11 amino acids;
the epitope is an HIV-1 epitope; and
the epitope corresponds to an HLA-A3 motif having an amino acid at position two from the amino terminal amino acid of the epitope selected from the group consisting of L, M, V, S, A, T, and F and having K as the C-terminal amino acid.

77. (New) A pharmaceutical composition consisting essentially of a peptide epitope having about 8 to about 11 amino acids and a pharmaceutically acceptable carrier, wherein the peptide epitope corresponds to an HLA-A3 motif having an amino acid at position two from the amino terminal amino acid of the peptide epitope selected from the group consisting of L, M, V, S, A, T, and F and having K as the C-terminal amino acid.

78. (New) A pharmaceutical composition consisting essentially of a nucleic acid which encodes a peptide epitope having about 8 to about 11 amino acids and a pharmaceutically acceptable carrier, wherein the peptide epitope corresponds to an HLA-A3 motif having an amino acid at position two from the amino terminal amino acid of the peptide epitope selected from the group consisting of L, M, V, S, A, T, and F and having K as the C-terminal amino acid.

DI 79. (New) A pharmaceutical composition consisting essentially of a peptide epitope having about 8 to about 11 amino acids and a pharmaceutically acceptable carrier, wherein:

the peptide epitope is an HIV-1 peptide epitope; and

the peptide epitope corresponds to an HLA-A3 motif having an amino acid at position two from the amino terminal amino acid of the peptide epitope selected from the group consisting of L, M, V, S, A, T, and F and having K as the C-terminal amino acid.

80. (New) The pharmaceutical composition of any one of claims 74-79, wherein the amino acid at position two from the amino terminal amino acid of the epitope is selected from the group consisting of L, M, V, and T and the C-terminal amino acid is K.

81. (New) The pharmaceutical composition of claim 80, wherein the amino acid at position two from the amino terminal amino acid of the epitope is T and the C-terminal amino acid is K.

Sub 82. (New) The pharmaceutical composition of claim 81, wherein the epitope consists of the amino acid sequence TTLFCASDAK.

83. (New) A diagnostic reagent comprising a peptide having less than fifteen amino acids, wherein:

the peptide comprises an epitope consisting of about 8 to about 11 amino acids; and

the epitope corresponds to an HLA-A3 motif having an amino acid at position two from the amino terminal amino acid of the epitope selected from the group consisting of L, M, V, S, A, T, and F and having K as the C-terminal amino acid.

84. (New) A diagnostic reagent comprising a peptide having less than fifteen amino acids, wherein:

the peptide comprises an epitope consisting of about 8 to about 11 amino acids;

the epitope is an HIV-1 epitope; and

DI the epitope corresponds to an HLA-A3 motif having an amino acid at position two from the amino terminal amino acid of the epitope selected from the group consisting of L, M, V, S, A, T, and F and having K as the C-terminal amino acid.

85. (New) A diagnostic reagent consisting essentially of a peptide epitope having about 8 to about 11 amino acids, wherein the peptide epitope corresponds to an HLA-A3 motif having an amino acid at position two from the amino terminal amino acid of the peptide epitope selected from the group consisting of L, M, V, S, A, T, and F and having K as the C-terminal amino acid.

86. (New) A diagnostic reagent consisting essentially of a peptide epitope having about 8 to about 11 amino acids, wherein:

the peptide epitope is an HIV-1 peptide epitope; and

the peptide epitope corresponds to an HLA-A3 motif having an amino acid at position two from the amino terminal amino acid of the peptide epitope selected from the group consisting of L, M, V, S, A, T, and F and having K as the C-terminal amino acid.

87. (New) The diagnostic agent of any of claims 82-86, wherein the amino acid at position two from the amino terminal amino acid of the epitope is selected from the group consisting of L, M, V, and T and the C-terminal amino acid is K.

88. (New) The diagnostic agent of claim 87, wherein the amino acid at position two from the amino terminal amino acid of the epitope is T and the C-terminal amino acid is K.

Sub 92
89. (New) The diagnostic agent of claim 88, wherein the peptide consists of the amino acid sequence TTLFCASDAK.

Sub 93
90. (New) An isolated cytolytic T cell line which specifically recognizes a complex of an HLA-A3 molecule and a peptide epitope of about 11 amino acids having the amino acid sequence TTLFCASDAK.

Sub 94
91. (New) An isolated antigenic HLA-A3 binding peptide derived from a HIV-1 protein having the following formula:

Xaa₁Xaa₂Xaa₃Xaa₄Xaa₅Xaa₆Xaa₇Xaa₈Xaa₉Xaa₁₀

wherein Xaa₂ is Leu, Met, Ile, Val, Ser, or Thr, and Xaa₁₀ is Lys or Arg, and said isolated peptide provides lysis by cytotoxic T cells specific for a complex of said HLA molecule and said decapeptide.

92. (New) The isolated antigenic HLA-A3 binding peptide of claim 91, wherein Xaa₂ is Thr and Xaa₁₀ is Lys.

Sub 95
93. (New) The isolated antigenic HLA-A3 binding peptide of claim 92 consisting of the amino acid sequence TTLFCASDAK.

Sub 96
94. (New) An isolated nucleic acid molecule consisting of a nucleotide sequence encoding the amino acid sequence TTLFCASDAK.